

In re Application of:
Kornowski et al.
Application No.: 09/868,411
Filed: June 14, 2001
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PATENT
Atty Docket No.: MEDIV2010-2

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Upon entry of the present amendment, the claims will stand as follows:

Please cancel claims 87, 90, 94-96 and 103-105 without prejudice.

Please amend claims 14 and 18 as follows:

1. (Previously Presented) A method of enhancing collateral blood vessel formation in a subject comprising directly administering to sites in heart or limb tissue an effective amount of autologous bone marrow aspirate to induce collateral blood vessel formation in the tissue.
2. (Previously Presented) The method of claim 1, wherein the autologous bone marrow aspirate is injected.
3. (Previously Presented) The method of claim 1, wherein the autologous bone marrow aspirate is injected intramyocardially.
4. (Previously Presented) The method of claim 2 wherein the autologous bone marrow aspirate is injected trans-epicardially or trans-endocardially.
5. (Previously Presented) The method of claim 4, wherein the trans-endocardial approach is via a catheter.
6. (Cancelled).

7. (Previously Presented) The method of claim 1, wherein the autologous bone marrow aspirate has been stimulated while growing in conditioned medium ex vivo, the conditioned medium comprising at least one agent selected from granulocyte-monocyte colony stimulating factor (GM-CSF), endothelial PAS domain 1 (EPAS1) and hypoxia inducible factor 1 (HIF-1).

8. (Previously Presented) The method of claim 7, wherein the autologous bone marrow aspirate has been stimulated by contact with one or more angiogenesis stimulating cytokines secreted therefrom while growing in conditioned medium ex vivo, the conditioned medium comprising at least one agent selected from granulocyte-monocyte colony stimulating factor (GM-CSF), endothelial PAS domain 1 (EPAS1) and hypoxia inducible factor 1 (HIF-1).

9. (Previously Presented) The method of claim 1, wherein the composition further comprises Monocyte Chemoattractant Protein 1 (MCP-1) or Vascular Endothelial Growth Factor (VEGF).

Claims 10-11. (Cancelled)

12. (Previously Presented) The method of claim 7, wherein the autologous bone marrow aspirate has been stimulated ex vivo in culture by transient exposure to hypoxia.

13. (Cancelled)

14. (Currently Amended) The method of claim 1, wherein the autologous bone marrow aspirate is administered in combination with one or more agent selected from a pharmacological drug[[],] or protein [[gene]] that enhances bone marrow production of angiogenic growth factors selected to promote endothelial cell proliferation, migration, or blood vessel formation.

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15. (Previously Presented) The method of claim 14, wherein the autologous bone marrow aspirate and the agent or agents are administered together.

16. (Previously Presented) The method of claim 14, wherein the autologous bone marrow aspirate and the agent or agents are combined ex vivo prior to administration.

17. (Previously Presented) The method of claim 16, wherein the autologous bone marrow aspirate has been stimulated ex vivo in conditioned medium, the conditioned medium comprising at least one agent selected from granulocyte-monocyte colony stimulating factor (GM-CSF), endothelial PAS domain 1 (EPAS1) and hypoxia inducible factor 1 (HIF-1).

18. (Currently Amended) The method of claim 1, wherein the ~~composition~~ autologous bone marrow aspirate is administered to ischemic tissue.

Claims 19-30. (Cancelled)

31. (Previously Presented) The method of claim 16, further comprising culturing the autologous bone marrow aspirate to form conditioned medium containing bone marrow cells and endogenously secreted angiogenic cytokines and injecting the composition into ischemic heart tissue.

Claims 32-105 (Cancelled)